

ABSTRACT OF THE DISCLOSURE

5 An immunogenic or vaccine composition to induce an immune response or protective
immune response against West Nile virus (WNV) in an animal susceptible to WNV. The
composition includes a pharmaceutically or veterinarily acceptable vehicle or excipient, and a
vector. The vector contains heterologous nucleic acid molecule(s), expresses *in vivo* in the
animal WNV antigen, immunogen or epitope thereof, e.g., WNV E; WNV prM and E; WNV M
and E; WNV prM, WNV M and E, WNV polyprotein prM-E, WNV polyprotein M-E, or WNV
polyprotein prM-M-E. The composition can contain an adjuvant, such as carbomer. Methods
for making and using such a composition, including prime-boost regimes and including as to
10 differential diagnosis, are also contemplated.